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SUBSTITUTE SPECIFICATION
(CLEAN COPY)

VERBENA PLANT NAMED 'SUNMARIVANI'

Botanical denomination:

Verbena hybrida

Varietal denomination: Sunmarivani

5 BACKGROUND OF THE VARIETY

The new variety of Verbena plant according to this invention originated as a mutation of *Verbena hybrida* 'Sunmariba'.

10 The Verbena is a very popular plant and is used for flower bedding and potting in the summer season. There are only a few varieties of the Verbena plant that have abundant branching, many yellowish white flowers in a spike, and a high resistance to heat, rain, and disease. The new variety, 'Sunmarivani' was discovered as a mutant and has many of those features including a decumbent growth habit, much branching, many flowers in a spike, high tolerance to heat and rain, and resistance to disease and pests.

15 The new variety *Verbena hybrida* 'Sunmarivani' was discovered as a spontaneous branch mutation of the *Verbena hybrida* 'Sunmariba' (U.S. Plant Patent No. 10,801) in May 1997 in a field of a nursery at Hakushu-cho, Kitakoma-gun, Yamanashi-ken, Japan.

20 The mutant Verbena plant was propagated by cutting and was grown in pot and bedding from May to November 1997 at Hakushu-cho, Kitakoma-gun, Yamanashi-ken, Japan.

25 The botanical characteristics of the plant were examined, using similar varieties 'Sunmariba' and 'Sunmaririho' (unpatented). It was concluded that this new Verbena variety is distinguishable from other varieties, whose existence is known to us, and is uniform and stable in its characteristics. The new variety of Verbena plant was named 'Sunmarivani'.

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In the following description, the color-coding is in accordance with the Horticultural Colour Chart of The Royal Horticultural Society, London, England (R.H.S.).

SUMMARY OF THE VARIETY

5 This new variety is unlike any *Verbena* known to us as evidenced by the following unique combination of characteristics.

1. Decumbent growth habit with abundant branching.
2. Plentiful number of flowers in a spike, having a great profusion of blooms with the entire plant remaining in bloom for a considerable period of time.
- 10 3. Long flowering duration.
4. The petal color is yellowish white (near R.H.S. 155B).
5. The plant has a high resistance to rain, heat, disease and pests.

The new variety 'Sunmarivani' differs from the similar variety 'Sunmariba' in the following points.

- 15 1. The spreading of plants of 'Sunmarivani' is larger than that of 'Sunmariba'.
2. 'Sunmarivani' does not have anthocyanin pigmentation on stems as is found in 'Sunmariba'.
3. The petal color of 'Sunmarivani' is yellowish white (near R.H.S. 155B), while that of 'Sunmariba' is vivid purple (near R.H.S. N81A).
- 20 4. The number of flowers per spike of 'Sunmarivani' is more than that of 'Sunmariba'.

The new variety 'Sunmarivani' differs from the similar variety 'Sunmaririho' in the following points.

- 25 1. The stem thickness of 'Sunmarivani' is thicker than that of 'Sunmaririho'.

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2. The leaf margin of 'Sunmarivani' is more sharply serrated than that of 'Sunmaririho'.

3. The flower height of 'Sunmarivani' is shorter than that of 'Sunmaririho'.

4. The peduncle length of 'Sunmarivani' is longer than that of 'Sunmaririho'.

This new variety of Verbena Plant 'Sunmarivani' was asexually reproduced by the use of cuttings from May to November 1998 at Yokaichi-shi, Shiga-ken, Japan, and homogeneity and stability thereof were confirmed. The instant plant retains its distinctive characteristics and reproduces true to type in successive generations.

BRIEF DESCRIPTION OF THE PHOTOGRAPHS

The depicted plants had been reproduced by the use of cuttings and were photographed during July 2002 while growing outdoors at an age of approximately 6 months at Yokaichi-shi, Shiga-ken, Japan.

FIG. 1 illustrates a typical plant of the new variety of Verbena plant 'Sunmarivani' growing in a hanging pot.

FIG. 2 illustrates a close view of typical foliage and blossoms of the new variety of Verbena Plant 'Sunmarivani'.

DESCRIPTION OF THE VARIETY

The botanical characteristics of the new variety of Verbena plant named 'Sunmarivani' are as follows.

Plant:

Growth habit. -- Decumbent.

Plant width. -- Approximately 60-80 cm.

Plant height. -- Approximately 10-20 cm.

Stem:

Diameter. -- Approximately 3.5-4.0 mm.

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Anthocyanin pigmentation. -- Absent.

Pubescence. -- Moderate.

Prickles. -- Absent.

Branching. -- Abundant.

5 Subterranean stem. -- Absent.

Length of internode. -- Approximately 3.5-4.5 cm.

Leaf:

Phyllotaxis. -- Opposite.

Shape of blade. -- Hastate.

10 Apex shape. -- Obtuse.

Base shape. -- Truncate.

Margin. -- Sharply Serrated.

Length. -- Approximately 4.0-5.0 cm.

Width. -- Approximately 3.0-4.0 cm.

15 Color. -- Upper side: Near R.H.S. 137A (grayish olive green); Lower side:
near R.H.S. 144A (strong yellow green).

Pubescence. -- Sparse.

Petiole. -- Absent.

Flower:

20 Shape of cluster. -- Obconical.

Cluster length. -- Approximately 3.5-5.0 cm.

Cluster diameter. -- Approximately 5.5-6.5 cm.

Facing direction. -- Upward.

Floret diameter. -- Approximately 1.5-2.0 cm.

25 Floret length. -- Approximately 1.5-2.0 cm.

Color of petal. -- Upper side: near R.H.S. 155B (yellowish white).; Lower
side: near R.H.S. 156C (yellowish white).

Eye color. -- Absent.

Variegation. -- Absent.

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Petal apex. -- Emarginated.

Number of petals. -- Generally 5.

Calyx length. -- Approximately 1.0-1.5 cm.

5 Calyx shape. -- Tubular. Sepals have an acute apex and are fused at the base.

Reproductive organs. -- 1 pistil and 4 stamens.

Pistil shape. -- Bifid.

Anther color. -- Near R.H.S. 1B (yellow green).

Filament color. -- Near R.H.S. 1B (yellow green).

10 Pollen. -- Present in a moderate quantity, color near R.H.S. 155B.

Stigma color. -- Near R.H.S. 4D (pale yellow green).

Style color. -- Near R.H.S. 144B (vivid yellow green).

Ovaries. -- Commonly four in number.

Peduncle diameter. -- Approximately 1.0-2.0 mm.

15 Peduncle length. -- Approximately 7.0-9.0 cm.

Peduncle color. -- Near R.H.S. 137C (Moderate yellow green).

Number of flowers per spike. -- Approximately 17.

Flowering period. -- April to November in the southern Kanto area, Japan.

20 The plant shape does not change throughout this period. A typical flower commonly lasts 5 to 7 days on the plant when experiencing a temperature of approximately 20°C.

Fruit and seed. -- Fruit and seed production has not been observed

Physiological and ecological characteristics:

Winter Hardiness. -- USDA Hardiness Zone 4-9 (Grown as perennial).

25 Heat tolerance. -- The plant grows well at temperature up to at least 35°C.

Disease and pest resistance. -- Resistant to powdery mildew. No serious damage by pathogen and pests common to Verbena has been observed.